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WAGE STRUCTURE AND WAGE POLICY IN THE UNITED STATES

In principle, wage rates in the United States have been stabilised since November 1942 at the then existing level. To a certain extent wage control had already been effective since Spring 1942, in so far as disputes arose over which the War Labour Board had jurisdiction. This Board, composed of representatives of labour, employers, and of government officials now has control over all wages, but it seems that its authority can be superseded by the Stabilisation Director.[1] The principle of the ‘ wage stop ’ is subject to four qualifications :

1. Groups of workers who have not had a 15% increase in wage rates since January 1941 are in general entitled to it (‘ Little Steel formula ’).
2. ‘ Substandards of living ’ may be eliminated ; the Board has never defined ‘ substandards.’ The Fair Labour Standards Act (1938) prescribes a minimum hourly wage of 30 cents, and under this act minima of 40 cents have been set up in many industries.[2] With a rise in the cost of living by 20%,

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[1] On one occasion a dissenting member of the Board stated that the Board had consulted with the Stabilisation Director before handing down its decision (International Labour Review, May 1943, p. 650).

[2] The Act does not apply to firms who produce for consumption within the region of a state, or to agriculture.

the equivalent corresponding to these minima would be 36 cents and 48 cents respectively. The Board has sometimes refused to take these standards as a guide, sometimes it has regarded much higher wages as the minimum subsistence level.

3. Inequalities of wages within an area or industry may be eliminated. In 1942 the Board has (e.g.) granted wage increases in the textile industry to eliminate differences between various mills, but lately the interpretation of this formula has become extremely narrow.
4. Wage increases which further the effective prosecution of the war may be granted. The Board has, however, declared that it could not use this formula for 'directing the flow of manpower.'[1]

With these qualifications (which have decreased in importance since November 1942) the Board's policy tends strongly to preserve the existing structure of wages. To get an idea of what this structure is like, the weekly and hourly earnings in various industries may first be compared (Table I). An attempt has been made to eliminate the influence of varying amounts of overtime in different industries, so as to get the 'straight-time hourly earnings.'[2] It must be stressed that this elimination of overtime pay is approximate, and that other premium payments (for second shift etc.) have not been eliminated.

As would be expected, earnings show a large discrepancy between war industries and others. Average straight-time earnings in war industries range from 90 cents upwards, whereas in non-war industries they are sometimes only 60 cents. The highest earnings are in ship building and automobiles, and—on a weekly, but not hourly basis—in machine tools. The large differential assists in bringing about the shift of labour to war industries which is still not completed. The high wage rates in some war industries which are necessary to attract a sufficient labour supply, are, however, also influenced by particular circumstances. It has been stated, for example, that in shipbuilding the workers spend 2 or 3 hours a day in travelling (owing to overcrowding in the shipbuilding centres) so that their 8 hour day is virtually much longer.[3]

The high wage level in munitions has brought about a danger of labour shortage in various essential industries where wages are still comparatively low. This applies to lumbering, mining (metal and coal) and to agriculture. Together these industries account for about 4 million workers. A less acute problem, but one that is likely to become important in the near future, is that of some non-war industries which will become essential when their labour force has reached the desired minimum. Several of these, like textiles (especially cotton manufacture), clothing, shoes, tobacco and the canning industry show weekly earnings of about $25, half of the average earnings in some war industries. Average straight-time earnings per hour in these industries are between 56 cents.

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[1] International Labour Review, April 1943, p. 514.

[2] The elimination is based on a correlation, computed by the Bureau of Labour Statistics, between weekly hours and the proportion of overtime in total hours worked. It is assumed that for hours in excess of 40 a week overtime is paid at time and a half. This applies to most manufacturing industries, but for non-manufacturing the work week is often different. See *Monthly Labour Review*, November 1942.

[3] *Victory Bulletin*, April 28, 1943, p. 462.

TABLE I.

Earnings and Hours in the United States Industries, January 1943

	Weekly Earnings $	*Hourly Earnings* cents	*Weekly Hours*	*Straight Time Hourly Earnings* cents
All Manufacturing ...	40.62	91.9	44.2	—
Durable Goods	46.68	101.7	45.9	—
Iron and Steel	44.91	99.8	45.0	93.0
Electrical Machinery ...	44.70	95.1	47.0	87.5
Machine Tools	53.25	101.4	52.5	90.0
Automobiles	55.85	122.2	45.7	113.5
Aircraft	46.94	101.0	46.5	93.5
Shipbuilding	57.24	121.6	47.1	110.5
Nonferrous Metals ...	45.30	98.7	45.9	92.0
Lumber and Timber basic products	27.10	68.1	39.8	66.0
Non-durable Goods ...	32.03	76.8	41.7	—
Cotton manufacture ...	24.22	58.2	41.6	56.0
Silk and Rayon	26.30	63.9	41.2	61.5
Woollen	32.84	78.9	41.5	75.5
Apparel	24.49	66.0	37.1	65.0
Leather	28.90	71.7	40.3	69.5
Food	33.18	76.8	43.2	72.5
Tobacco	24.07	61.1	39.4	60.0
Chemicals and allied ...	39.38	88.5	44.5	83.0
Rubber Products ...	43.25	97.2	44.5	91.0
Non-Manufacturing :				
Building Construction ...	46.03	124.0	37.1	
Anthracite Mining ...	31.25	100.7	31.0	
Bituminous Coalmining	37.55	108.5	34.7	
Metalliferrous Mining	41.16	94.1	43.3	
Electric Light and Power	42.05	102.6	40.5	
Street Railway and Buses	42.49	85.2	49.3	
Telephone and Telegraph	34.51	84.0	41.2	
Retail Trade ...	24.37	64.5	41.3	
Power Laundries ...	22.78	51.9	44.1	

and 70 cents. As soon as an acute labour scarcity in these industries arises, their position will be the same as that of the lumbering industry at present (in some cases, as in the hosiery industry, a labour shortage has already arisen). The problem can be solved in part, but not wholly, by an increase in the number of hours worked. The low level of earnings in most of these industries is largely due to the predominance of female labour, and to the fact that they are mostly situated in the South.

The comparison of earnings in the various industries is complicated by regional and occupational differences, and differences in men's and women's pay. The importance of regional differences which are one of the most prevalent forms of inequality in the wage structure, can be seen from the comparison of roadbuilding wages and farm wages in different regions :

The road building wages vary by as much as 1 : 2, the farm wages by 1 : 3 in different regions. The entrance rate of common labour (male adult) in industry varied between 40 cents and 80 cents an hour in various regions in July 1942. The main difference is between North and South. In part these differences have been lessened during the war, but they are still very great. They are mainly due to different degrees of scarcity of labour in relation to demand. A successful manpower policy should reduce these differences in relative scarcity (either by

TABLE II.

	Road building Hourly wages		*Farm Wages per day "Without Board"**
	$	*July 1942*	$
U.S.	0.59		2.45
New England	0.69		3.76
Middle Atlantic	0.69		3.48
East North Central	0.75		3.20
West North Central ...	0.60		3.29
South Atlantic	0.48		1.64
East South Central	0.41		1.42
West South Central ...	0.41		1.92
Mountain	0.71		3.53
Pacific	0.95		4.56

* i.e. for workers who are paid exclusively in cash.

shifting labour or by appropriate location of production) and a decrease in regional differencces would, therefore, be an indication of successful labour policy. In some industries where national wage agreements have been made (as in shipbuilding) regional differences have been reduced or eliminated. This must tend to react on the general wage level in the low paid regions. On the other hand, the War Labour Board rejected the demand of the Textile Workers' Union for elimination of the North-South differential in the cotton textile industry.[1]

The difference between men's and women's earnings was considerable in most industries in peace time, but the announced policy of the War Labour Board of 'equal pay for equal work' and the demand for women workers have strongly tended to increase women's wages in war industries both absolutely and relatively to those of men.

The need for a more flexible wage policy can be shown in the case of three great essential industries in which the present wage level is still influenced by the depression of the past. In the *lumbering industry* there are two main regions, West and South. The average entrance rate in the North-West for common labour was 64 cents, in the South 36 cents in July 1942. The wage level in the West is much higher than the national average, weekly earnings being $39 in July 1942, as compared with $27 on the national average. Nevertheless the earnings in lumbering in the West are considerably lower than those in shipbuilding ($55) and aircraft industry ($45) in the same region, where an acute labour shortage prevails. In addition, the industry is seasonal and gives less continuous employment than the competing industries. The consequence is a very high rate of labour turnover and decrease in employment. In September 1942 a 48 hour week was ordered and an attempt to 'stabilise' employment was made. In the South wages are very low, which mainly accounts for the low national average. Total employment in lumbering has continued to decrease since September 1942.

In *coalmining* the average weekly earnings in October—December 1942 were $35 for anthracite and $38 for bituminous coal, considerably lower than in war industries.[2] In part this was due to relatively short

[1] Monthly Labour Review, January 1943, p. 59.

[2] After the strike of anthracite miners in January, weekly hours were increased.

The figures for February are:	hours	hourly earnings cents	weekly earnings $
Anthracite mining	41.5	106.9	44.47
Bituminous coal mining	37.0	111.3	41.49

hours (little overtime in excess of the 35 hour week). After the strike at the beginning of May, a six hour day (42 hour week) with overtime payments was ordered, but there is no guaranteed week. Hourly earnings of about 108 cents in bituminous coal mining are only apparently favourable as compared with manufacturing ; they are in fact based on the time spent at the coal face, and the time spent in underground travelling is considerable though it may vary from mine to mine. It was estimated by the mine owners at 48 minutes a day, whereas the miners' representatives put it at 90 minutes a day during recent negotiations. The hourly earnings would thus have to be reduced by at least 10% to make them comparable to factory earnings. Moreover, a certain differential in hourly earnings in favour of coal mining would be justified on the basis of long run considerations (the labour supply in the long run would dwindle, if, as may be assumed, potential entrants prefer factory work at the same wage).

One of the most acute labour shortages has arisen in *agriculture.* Farm wages have increased considerably during the war, but they are still very much lower than almost all industrial wages. The daily wage ' without board '[1] was $2.76 in October 1942 ; the working day is about 10 hours, so that the hourly wage was 28 cents on the average in the U.S., lower than the minimum under the Fair Labour Standards Act (viz. 30 cts.). The regional differences can be seen from Table II. The low level of farm wages is due to the long standing depression in agriculture since the period after the last war. On an annual basis it has been calculated that farm workers earned on the average ⅓ of what factory workers earned in 1929, and in 1941 the proportion was about the same.

Average Annual Income in $.*

	A : Farm Workers †	*B : Factory Workers*	*Proportion A : B*
1929	430	1302	33%
1939	378	1153	33%
1941	470	1457	32%

* Monthly Labour Review Dec. 1942. † Includes board and perquisites.

The acute labour problem of the industry has led to the exemption of farm labour from the wage stop shortly after the latter was introduced. Farm wages have, in fact, continued to rise, and the average monthly rate 'without board,' was $67.21 in April 1943.[2] Even so, this means a weekly wage definitely below $20, for a long working time (the working week is about 60 hours in summer) and with partly very skilled labour. The consideration of ' perquisites ' (e.g. the right to buy farm products at lower price) which are estimated at about 10% of the wage cannot change the conclusion that farm wages are too low to offer a sufficient incentive to the farm worker to stay on the farm of his own accord. As collective bargaining is unimportant in this field, and the competitive bidding up of wages is not free from friction, the best solution would be the introduction of minimum wages regionally, with a certain levelling up of regional differences.

These examples show that the preservation of the existing wage structure which, incidentally, has not solved the problem of inflation, has created considerable problems of its own. The symptoms are high labour turn-over, loss of labour supply in essential industries, and strikes. The objection against introducing greater flexibility is based on the fear of inflation. But in the field of prices the original idea of a strict 'ceiling' has already been abandoned in favour of a more flexible policy, largely out of regard for the farmers' interests. Some prices will be allowed to rise and the aim of the administration is to compensate this rise by subsidies and other means.[1] Why should this flexibility not be possible in the field of wages? There is, in principle, no difference between the case of the farmers and that of groups of workers whose remuneration is still influenced by the depression of the past.

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[1] i.e. wage of workers who are paid exclusively in cash.

[2] Refers to workers who are paid exclusively on cash basis.

J. STEINDL.

SOME NEW ESTIMATES OF CONSUMPTION.

Information given in the latest White Paper on War Finance and the National Income of the United Kingdom (Cmd. 6438) enables us to obtain revised estimates of changes in consumption between 1938 and 1942, for most of the main groups of expenditure. Estimates are there given for personal expenditure on consumption at market prices, under nine main headings, as well as for the total. Index numbers of prices are available for food, rent, fuel and light, and clothing which can be used to deflate the figures of expenditure, thus providing index numbers for the consumption of these items, in real terms. For drink and tobacco, direct estimates can be made of changes in consumption and price indices are then obtained by comparing the figures of consumption and expenditure. Since the White Paper publishes an index number of consumption for all items combined, indirect estimates can also be made of changes in consumption and prices of the remaining items, considered as a separate group. All the figures refer to personal consumption of the total population, including income received in kind.

Estimates for beer and tobacco are readily obtained. Changes in tobacco consumption up to 1941 are indicated by published figures of the amount of tobacco released from bond, while for 1942 we have the statement[2] that consumption was 20—25% higher than in 1938, which for present purposes may be taken as 22½%. For beer, we should consider the consumption in standard barrels, in order to avoid the effects of dilution, which appear in the figures of bulk barrels. For 1938, we have the amount retained for home consumption and for 1939, 1940 and 1942 figures have been given by the Chancellor of the Exchequer.[3] A comparative estimate for 1941 can be obtained from annual figures of the home output of beer, which accounts for all but a small proportion of total consumption.

Spirits and wines are a little more difficult. Comparative figures for the consumption of spirits have been given for 1939, 1940 and 1942.[4] These figures can be assumed to include spirits used for medical and scientific purposes, which, in 1938, when fuller information was available, amounted to 5—6% of total consumption ; the proportion may have changed during the war but it is unlikely that this would have disturbed the comparison. An estimate for 1941, the only year not covered by the data, must be made by interpolation.

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[1] The fate of the subsidy scheme is apparently still in the balance owing to the attitude of Congress, but in the event of a rejection of this policy it will, in any case, hardly be possible to maintain the wage stop.

[2] Captain Waterhouse in the House of Commons, 17/3/43.

[3] Statements in the House of Commons, 16/12/41 and 6/5/43.

[4] Sir Kingsley Wood in the House of Commons, 2/12/41 and 6/5/43.

Approximate estimates of changes in the consumption of dutiable goods can be obtained by deflating the yield of customs and excise duties for increases in the rates of duty; from the resulting figures, which refer to financial years (ending 31st March), we can interpolate to obtain estimates for calendar years. In the case of spirits, however, the yield of customs duties includes the differential charges on imported spirits used for industrial, scientific and other purposes, which may have increased considerably during the past few years, and which may blur the picture, therefore, as far as it relates to human consumption. For each year from 1939 to 1942, separate indices were obtained for home produced and imported spirits, from the yield of excise and customs duties respectively, and were then weighted in the proportion 9 : 1, according to their relative importance in 1938. Taking 1938 as 100, the resulting index numbers for the four years 1939 to 1942 were 104, 96, 93, 97, whereas the actual figures which are available for 1939, 1940 and 1942 yield index numbers for these three years of 104, 92 and 94. It is seen that the index numbers obtained from the yield of duties are slightly too high, both in 1940 and 1942, probably for the reason stated; for 1941, therefore, we shall reduce the estimate from 93 to 90.

Estimates for the consumption of wines, obtained in a similar way, are rather more doubtful because changes in consumption have been very much greater and there are no figures after 1940 which can be used as a cross-check. But since wines account for only a small proportion (about 7% in 1938) of total expenditure on drink and tobacco, any errors in the figures, the general trend of which is reliable, are of little consequence. Imported and British wines (' sweets ') were combined in the ratio 4 : 1, roughly according to relative expenditure in 1938; the resulting indices for 1939 and 1940 were 94 and 90 (1938=100), which compare with 97 and 85, as shown by actual figures of the amount retained for home consumption,[4] imported and British wines being weighted again according to relative expenditure. The discrepancy is comparatively small and may be partly due to interpolating from financial years to calendar years. For the subsequent calculations we have used the known figures of consumption in 1939 and 1940 and estimates, from the yield of duties, for 1941 and 1942, which are shown in Table I. The index numbers of drink and tobacco combined were obtained by weighting the four items (tobacco 17, beer 17, spirits 7, wine 3) according to estimates of total expenditure in 1938.[5]

It should, perhaps, be added that all these figures, both the estimates and those officially quoted, must be presumed to refer, not to the quantities sold to the final consumer, but to the amounts passing through the stage at which duties are payable ; and although in normal times the latter can be taken as reflecting changes in actual consumption, this may not be true over the past few years.

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[1] Figures for 1939 and 1940 given by Sir Kingsley Wood, House of Commons, 27/1/42.

[2] Shirras and Rostas, *The Burden of British Taxation.*

Table I.

Index Numbers of Consumption of Drink and Tobacco.
(1938=100)

	1939	*1940*	*1941*	*1942*
Tobacco	106	101	117	122½
Beer (standard barrelage)	103	99	105	100
Spirits	104	92	90	94
Wines	97	85	54	26
Drink and Tobacco combined ...	104	98	104	103

The consumption of beer (in standard barrels) has remained practically constant since 1938, owing to the control of output. The large reduction in wines (mainly imports) was to be expected, but the reduction in spirits is surprisingly small. The combined index is dominated by beer and tobacco, which have been discussed in previous BULLETINS.

As regards the other main groups of expenditure, index numbers of food prices in 1941 and 1942 were taken from previous estimates,[1] the Ministry of Labour's index being used for 1940. For rent (including rates and water charges), fuel and light[2] and clothing, we also used the Ministry of Labour's cost of living index, but the index of clothing prices was reduced in each year by 5%, since it was found to be over-estimated by about this amount.[3] The official estimate for rent, showing an average increase of only 2½% since 1938, mainly refers to working-class dwellings and does not include furnished houses, so that it probably understates the increase in the general level of rents over the whole country. Of the figures in Table II, therefore, those shown for rent are the most doubtful. All the price indices in the Table refer to market prices, including the effects of taxes and subsidies. The index numbers of expenditure and the three sets of figures relating to total consumption are obtained directly from the White Paper.

The group called ' Remaining Items ' is comprised of household goods, travel, services and other goods, including income issued in kind to members of the forces. The index of average prices, therefore, covers a wide range of items, some of which, such as household goods, have risen very considerably in price, while others must have remained fairly stable. No doubt the average reduction in consumption of about 30% in this group also conceals wide variations for different items.

It is notable that while the consumption of food has fallen by 14% and that of clothing by some 40%, the consumption of fuel and light, excluding the amounts used for industrial purposes, shows only a very moderate decline, of about 4% since 1938. The average reduction of 18% in the consumption of all items combined, implying an average reduction per head, allowing for increase in population, of about 19%, probably takes insufficient account of the decline in quality of many goods, which of course in some cases is impossible to estimate ; the same applies to the adjusted index, given below.

It is stated in the White Paper that ' from slightly different points of view it would be possible to adopt a system of weighting which would justify an index of quantity changes either higher or lower than the one

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[1] BULLETIN Vol. 4, No. 6, p. 134 and Vol. 4, No. 17, p. 322.

[2] The Ministry of Labour's index excludes electricity and paraffin but their inclusion would probably make little difference.

[3] BULLETIN Vol. 3, No. 14, p. 329.

Table II.

Index Numbers of Personal Expenditure, Prices and Consumption.

(1938=100 in all cases)

	1940	*1941*	*1942*
Food			
Expenditure	103	105	110
Prices	117	126	127½
Consumption	88	83½	86
Drink and Tobacco			
Expenditure	137	166	202
Prices	139	160	197
Consumption	98	104	103
Rent (incl. rates and water charges)			
Expenditure	105	104	104
Prices	102	102½	102½
Consumption	103	102	101
Fuel and Light			
Expenditure	108	120	125
Prices	116	125	130
Consumption	93	96	96
Clothing			
Expenditure	112½	102	105
Prices	130	168	181
Consumption	87	61	58
Remaining Items			
Expenditure	96	104	108
Prices	123	147	156
Consumption	78	70	69
TOTAL			
Expenditure	106	112	119
Prices	121	136	145
Consumption	88	82	82

given here.' It is mentioned, by way of illustration, that 'an index of the nutritional value of food consumed would show a smaller decline'; and that if allowance were made for rationing and other forms of control, which restrict the consumer's freedom of choice, a larger decline would be shown. It may be doubted whether changes in the nutritional value of food consumed, though important in themselves, can be identified with changes in consumption, as usually understood; and there is no similar procedure which can be applied to other items. But a slight adjustment can be made for the effects of rationing and shortages, using the figures given in a previous BULLETIN.[1] The following results are then obtained:

Index Numbers of Total Consumption (adjusted)

1938	*1940*	*1941*	*1942*
100	86	79	79

After this somewhat hypothetical adjustment has been made, the figures show a decline of about 21% in total consumption, or about 22% per head, which is still considerably less than was generally anticipated as necessary in the early months of the war.

J. L. NICHOLSON.

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[1] Vol. 5, No. 7, p. 110.

THE COAL PROSPECTS FOR 1943-44

The winter 1943-43 passed without any serious difficulties in coal supply. Another war winter is not far off. Can we reasonably hope that the present coal policy will carry us through the next 12 months, or are new and more radical measures needed ? The recent debate on coal in the Commons and speeches by Government officials, coal controllers, employers' and workers' representatives show that last year's division of opinion still persists. Let us examine what the position is and see whether new factors have emerged which make a reconsideration of policy necessary. Government measures followed three main lines: to stimulate output, to curtail consumption and to improve distribution.

OUTPUT AND MANPOWER

(1) Numerous measures were tried to increase output. Miners were directed back from other occupations to the mines, and a few thousand men were released from the Forces. The recruiting drive for young miners was intensified. Against this gain must be set the annual wastage of about 20,000 men (at the present rate) and the absorption of miners into the Forces. The net increase in the number of workers was of the order of 2 per cent. or about 14,000 men from summer 1941 to 1942, and since then the number has been fairly constant (see Table I). The inflow of men in the last 18 months was mainly of a non-recurring nature and unless special measures are taken a similar absolute increase in numbers in 1943-44 cannot be expected. In fact, we must expect the wastage to exceed new entries and a figure of 710,000 workers in the mines for the average of 1943-44 may be regarded as the prospective maximum.

TABLE I

Coal Mining: Output and Employment (Great Britain)
(to the nearest thousand)

(*a*) = output in tons ; (*b*) = average number of wage earners.

	1939		*1940*		*1941*		*1942*		*1943*	
	(*a*)	(*b*)	(*a*)	(*b*)	(*a*)	(*b*)	(*a*)	(*b*)	(*a*)	(*b*)
Jan.—March			55,978	760	50,250	695	50,929	707	50,772	712
April—June			61,974	764	51,065	690	49,871	708		
July—Sept.			55,168	755	51,616	697	49,940	711		
Oct.—Dec.	59,321	758	51,179	717	53,414	707	52,893	711		
Year	231,338	766	224,298	749	206,344	698	203,633	709		

The increase in numbers, however, did not produce a corresponding increase in coal output. The official figure of total output for 1942 is 2.7 million tons lower than that of 1941. Had productivity been unchanged, the 1942 output would have been more than 4 million tons above the previous year. If the rate of decline in output per man-week which was apparent in recent quarters remains constant, the 1943 output with the present labour force will be below 200 million tons, and possibly nearer 195 million tons.

The decline in productivity is smaller in this war than in the last, mainly because of the timely introduction of rationing, better distribution and, partly connected with this, the smaller number of disputes (see Table II). To judge by the 1914-18 experience, it would be a great achievement if the prospective fall in output per head could be arrested. But there are many causes making for this decline and numerous methods are already being employed to deal with them. Part of the trouble arises from the greater proportion of aged miners which is inevitable in war-time. The over-50's represent more than 20% of the total number of miners, and on them the exhaustion and fatigue of longer shifts during three years of war have had their effect. But their attendance is regular, while the young[1] cannot yet feel the strain, but their rate of output is relatively low because of a higher rate of absenteeism.

TABLE II

Output per head, 1914—18 and 1938 to *1943**

Output per wage-earner per week			Output per wage-earner per week		
	Tons	1913=100		Tons	1938=100
1913	5.02	100	1938	5.57	100
1914	not available		1939	5.81	104
1915	5.21	104	1940	5.72	103
1916	5.03	100	1941	5.67	102
1917	4.79	95	1942	5.50	99
1918	4.45	89	1943†	5.40	97

* Hansard, June 1943 † First five months.

To reduce the fatigue element the Ministry of Fuel and Power speeded up the provision of adequate canteen facilities, of hot meals, etc., and extended medical services, both ante-care and post-care. But canteens may not prove as successful in mining as in manufacturing industries, because conditions of work and life in mines differ so much from those in other occupations. It might have been preferable to provide extra rations in the case of miners, but the Government did not accept the principle of differential rationing, presumably on the ground that to introduce it in one industry might have given trouble in other industries. Whether the inducement of extra rations in addition to canteen facilities would be sufficient to attract labour to mining and to increase the output per head of those already in the mines it is difficult to say, but the experiment may be worth trying.

The question of incentives is complex. The district bonus scheme, using money incentives, gave little inducement to the individual miner, because any extra effort of an individual miner was liable to be swamped by under-production in other mines of the district. Bonus schemes for pits or for teams of workers are likely to give better results, though the fixing of targets may prove difficult.

The difference between miners' wages and those earned in nearby munition factories is said to be a source of irritation in mining centres. Average earnings of all workpeople (including juveniles) in coal mining rose by 65% from September 1939 to March 1943 (Labour Gazette, June 1943); that is just as much as earnings on the average of all industries. But miners' wages were depressed before the war relatively to other industries and allowance must be made for the greater risk and unpleasantness of work in the mines.

A properly devised money incentive should, therefore, not be ruled out as a method of stimulating output. On the other hand it is alleged that existing money wages are high relatively to the spending possibilities in the mining villages. It would be important to have this presumption confirmed by a survey of miners' family budgets. Men with families can hardly find difficulty in spending their whole income if they buy full rations, while unmarried men and childless couples, or families with several earners, may feel that the marginal utility and disutility of work is equated by not working, say, the Monday shift. There again differentiation in pay or more rations for more work and more regular attendance, may offer a theoretical solution, but it would hardly be acceptable to men in the industry or their representatives. The opposite way of making it harder for miners to earn enough for maintaining their customary standard of living has been tried in the Ruhr (Germany) but the experiment was disturbed by other factors and no lessons can be drawn from it. In any case, it would be a highly regressive step and most likely to give negative results by spreading dissatisfaction throughout the industry.

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[1] This proportion of youngsters under 18 has not been disclosed but may have risen too. Their lack of experience may affect output, too.

If it is difficult to give inducements in the form of current supplies for good and regular work, then the offer of future advantages might be tried : certain priorities or guarantees for the post-war period ; full Beveridge pensions for the over 55's at the end of the war ; free technical training for the youngsters; housing subsidies and priorities for the middle aged. These may not be the best stimuli but it is hard to believe that the miners' imagination would not be caught and their exertions increased by granting well chosen post-war preferences or priorities now.

A sample enquiry may very well help in choosing the appropriate inducements. Such inducements will not eliminate all 'avoidable' absenteeism which the Ministry puts at 4½% of total man-shifts possible (including Sunday shifts and overtime), they may, however, retard the decline in individual exertion, sufficiently to gain the 4 million tons which the Minister said could be obtained by reducing absenteeism by half. Moreover, the average number of shifts worked by men actually employed exceeds 5¾ per week now as against 5⅝ in 1941-42, and miners work one-third of a week more than before the war (Hansard, June 12, col. 1219 and 1226). Such an extension of working time may well be above the optimum and a free shift every fortnight or three weeks may tend to increase output. At any rate experiments in a few mines or coal fields could be made to test the possibility of increasing output by reducing working time.

Transfers of surface workers to underground work at the coal face[1] have made some progress in recent months (2,700 men have gone, mostly voluntarily) and up-grading is also proceeding. It is now stated that there is room for 20,000 more coal face workers in the pits and, with a little preparation, for another 15,000 (Hansard col. 1264).

But output policy is not confined to manpower questions. Much can—at least theoretically—be gained by concentrating work on the better mines or better seams, and a good deal more by mechanisation. In all directions progress has been made, though at a moderate rate. Regional Controls are at work and some 50 pits (out of about 1,900 mines) were wholly or partly closed in 1943. It is estimated that the gain from concentration will amount to 1 million tons in 1943. But labour and capital are opposed, though for different reasons, to a vigorous policy of concentration. Labour transfers imply readjustments and discomfort for the workers, and the danger of dismissal or non-reinstatement after the war ; the owners fear that a closed pit may not be reopened, and try to demonstrate that present gains would be negligible or negative. The Ministry is thus forced to go slow, and it is quite possible that the hope to gain one million tons from concentration will be over-optimistic. For similar reasons too much reliance should not be placed on extended mechanisation. The introduction of new machinery is limited partly by home capacities, partly by overseas supplies, and the transfer of existing machinery meets the same obstacles as concentration.

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[1] The compulsory transfer of boys aged 16 to 18 to underground work, which Mr. Bevin demanded, may seriously lower output per head not only of the forced labour but of face workers generally.

Taking into account the various factors affecting coal output and the rate of adaptation of Government policy to changed conditions, we may sum up by saying that at best output will be maintained at the 1942 rate of 203 million tons per annum, but will be more likely to fall below the rate of 200 million tons.

CONSUMPTION AND DISTRIBUTION

A mild winter and a correspondingly generous response of domestic consumers to the economy appeal and the drive for industrial fuel efficiency resulted in a substantial saving of coal. A reduction of 8 million tons was appealed for, the actual saving was 11 million tons. Fuel Efficiency Committees, supported by 650 skilled engineers, visited about 11,000 factories consuming 29 million tons of coal annually, and effected savings of about 10% in their consumption.

Distribution was improved in several respects : (*a*) the establishment of regional controllers led to improved ' zoning ' and ' grading ', and thus avoided a fair amount of cross-carrying of coal ; (*b*) 'programming' was extended ' even to Service departments ' by allocating to individual industrial units average weekly deliveries of coal of appropriate grades, and thus high grade coal was reserved for high grade users ; (*c*) for domestic consumers some general regulations were issued asking merchants to give priority in the early autumn to consumers with stocking facilities and in the winter months to those unable to stock.

It is likely that efforts will be increased to perfect the zoning and grading of coal and the economies which can be derived from allocating the appropriate grades of coal to industrial units. Such attempts at quality substitution have to overcome the resistance of individuals and groups against replacing their customary brand which gave satisfactory results in times of ample coal supply by one of different, and possibly lower, quality. Progress in this direction is, therefore, necessarily slow, and both technically and psychologically intricate.

As to domestic consumers, the Government apparently intends to continue last year's policy of economy appeals and priority regulations. The Minister, in defending this policy, declared that less fuel was used last year than would have been required to meet coupons under the rationing scheme. There is, however, no guarantee that last year's success can be repeated this year ; for it is uncertain how much a mild winter contributed to the extra saving and it must be taken into account that the effect of appeals wears off as time goes by, and that any extra saving beyond last year's target will be disproportionately harder to achieve. Assuming an average winter, it may perhaps be hoped to reach the target saving of 8 million tons (compared with the 1941 consumption), but it would be bold to budget for more.

In assessing the coal situation, the question of stocks presents great difficulties. There are no figures available about stocks held by domestic consumers, though there can be no doubt that they are much greater than in peace time. Mr. Grenfell stated (Hansard, 23rd June, col. 1182) that we began the winter 1940-41 with 28 million tons of coal in stock, the winter 1941-42 with 38 million tons, and that we finished both winters with a stock of 14 million tons. How these estimates were arrived at and what kind of stocks they included was not stated. It is clear, however, that a minimum stock must be maintained in all circumstances to permit smooth distribution and to guard against transport difficulties. This distributive minimum varies with the seasons, but if we put it at 10 million tons at the end of the winter—a mere guess—the free reserve of coal in stock would be of the order of 4 million tons. Such free reserves would be needed to meet, for instance, extra demand arising out of the invasion of the European mainland, to run the railway system of Sicily or Italy, and to maintain essential services for the invading force. Considerable quantities may be needed for this purpose[1] and must in the first instance be supplied out of stock.

If we piece together the various trends we may say that industrial demand for coal is likely to expand in the coming winter, but that this expansion may be partly or wholly compensated by savings through the efficiency campaign. Domestic consumption, assuming an average winter, can hardly be reduced below last year's target, and is likely to be higher than last year's actual consumption. Extraordinary demand due to military developments is bound to increase. Against this must be set a probable decline in output of an order comparable to the free reserves assumed above. The coal situation may therefore become very tight in the first quarter of 1944.

If that is the prospect it may be wise to prepare against this eventuality and to plan now for further and controlled reduction in domestic consumption. Intermittently, miners' leaders and Government spokesmen have indicated that coal rationing may soon be necessary. To introduce it in mid-winter presents obvious difficulties; in fact to introduce it after domestic restocking has been completed is likely to prove as unfair as to choose last year's actual consumption as the standard basis for rationing. If consumers' stocks cannot be checked from merchants' books, it is also too late to attempt rationing on the lines of the Beveridge scheme.[2] Since more drastic action has been delayed so far, there is probably no other course than to gamble on a mild winter and to accept the hazards of maldistribution, while at the same time making the best of the production and saving policies which have been initiated. However, as the winter decline of stocks may be more than seasonal and the prospective demand of the invading forces is likely to rise, a strong case can be made out for introducing rationing towards the end of the winter in order to preserve or to re-accumulate stocks which will be difficult with a further decline in productivity. By that time the

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[1] Shipments of British coal to North Africa alone are made at the rate of 600,000 tons per annum. (*The Times Trade and Engineering Supplement*, July 1943, p. 40).

[2] BULLETIN Vol. 4, p. 145.

Board of Trade will have decided upon the cut in the clothing ration. A flat cut in the clothing ration is likely to cause hardship to the poorer population ; while coal rations may cause hardship for the owners of big houses. Group rationing of fuel and clothing[1] with its inherent possibilities of personal adjustments would under these circumstances seem to be a more satisfactory solution than separate rations which will inevitably become rather complex to meet individual differences in needs.

F. A. BURCHARDT.

DIARY

THE CINEMA TRADE IN EUROPE.

A recent publication of the German Institute for Economic Research throws some light on developments in the German film industry. Various factors have contributed to the prosperity of the industry: the growth of population, due to the extension of the Reich territory ; the elimination of foreign competition during the war ; and the development and maintenance of full employment, combined with a growing scarcity of outlets for spending. As in this country, but still more so, this last factor led to an increase in the number of annual cinema attendances and box office gross takings, of which less than 10% go to the authorities as Entertainments Duty—compared with about 30% in this country.

TABLE I.

The German and the British Cinema Trade

	Germany			*Great Britain*	
	1932/33	*1938*	*1942*	*1938*	*1942**
Total Population (mill.)	66	75	110	46	47
Annual Cinema Attendance per head of population	3.6	5.9	9.9	25	32
Total Weekly Admissions (mill.) ...	4.6	8.5	21	22	29
Average Price per Ticket Rm. ...	0.74	0.80	0.85	10d.	1/3
Box Office Gross Takings Rm. Mill.	180	350	940	£m. 46	94

* Estimates.

In all the Continental countries German films have ' captured ' the first place, mostly the supply of more than half of the total market. Four countries were still an exception in 1941 : Hungary, Sweden, Portugal and Switzerland. Some European countries have increased their own film production ; Italy did so quite appreciably, while Switzerland started to produce only at the outbreak of the war.

A much bigger market is supplied now by Germany with a smaller number of new films and with more copies per film, i.e. at much lower cost. The divergence between rising demand for, and falling supply of, new films was met by the development of film copying (250—300 copies per feature film in 1942 as compared with 70—80 copies in 1938), the longer run of each copy and the filling of programmes with ' shorts.'

The prosperity of the German film industry has been accompanied by an extreme financial concentration. Only eight companies carry on film production in Germany, and their spheres of artistic and territorial interest are so much divided that they practically do not compete with

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[1] BULLETIN Vol. 4, p. 215.

TABLE II.

The Film Supply of the European Continent

	Germany		*France*		*Italy*		*Total Continent*	
	Number	%	*Number*	%	*Number*	%	*Number*	%
1934-35								
*Total Film Supply**	260		460					
Of the Films :								
American		25		54				
German		50		13				
French				24				
Italian								
1938								
*Total Film Supply**	160		430		320			
Of the Films :								
American		22		60		59		
German		62		6.1		5.9		
French				28		13		
Italian		4.4				14		
Film Production	(99)	(22)					(44)	(100)
1941								
*Total Film Supply**	99		100		240			
Of the Films :								
American						10		
German		68		55		31		
French				43		6.2		
Italian		21				38		
*Film Production**	(67)	(18)					(380)	(100)

* Only Feature Films.

each other. Only two firms manage German film distribution. All ten firms are subsidiaries of the one central holding company, the Ufa, in which the German State and the Nazi Party have controlling interests. Financial concentration has also proceeded in the realm of cinema ownership, although no new theatres have been built during the war. There are 7,000 cinemas with 3 million seats in Greater Germany as compared with 4,600 cinemas and 5 million seats in Great Britain.